

### ***Select Problem Indicators by Geography***

This section presents data that are available at a sub-state level in order to determine geographic areas that experience higher rates of substance use-related problems. Several issues should be considered in this type of analysis.

First, the size of the population of the county and the absolute number of substance use-related events should be taken into account. A county might have a high rate of the problem compared to other counties but the county's population and the number of people experiencing the problem may be relatively small. An intervention may not be able to achieve sizable reductions in an already small audience. Population estimates in 2005 for each county are provided in Appendix C and demographic information about the population of Arizona is provided in Appendix D.

Secondly, looking at problems by county may mask high rates of problems in smaller geographic areas. For example, Maricopa County is so big that one rate to describe all of its constituent communities may understate a particular municipality's problems.

Finally, the relationship between problem prevalence and intervention need should be considered. A motor vehicle crash may not occur in the same place that the person became intoxicated or learned the behaviors that resulted in the crash. This is even more salient for prevention interventions where antecedents to the actual problem may have developed years before the problem event and in a different location.

In addition to this printed Substance Abuse Epidemiology Report, data for 14 demographic elements, 10 risk factor elements, and 8 consumption indicators are examined at a sub-county level known as a Community Health Analysis Area (CHAA). The CHAA is a geographic segment used by the Arizona Department of Health Services' Bureau of Public Health Statistics for public health surveillance. The community health analysis area is large enough to provide a population size meaningful for statistical analysis but small enough to capture geographic variations and maintain a sense of community or neighborhood. Data for the 126 CHAAs in Arizona are located in Appendix F.

**Consumption by Geography.**

Tables 4.90 through 4.95 present county level data from the *Arizona Youth Survey* on past 30-day alcohol use, past two-week binge alcohol use, past 30-day cigarette use, and past 30-day illicit drug use, including methamphetamine-specific information, for 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students.

Past 30-day alcohol use seems to be especially problematic for youth in rural areas, as higher percentages of youth in Gila, Greenlee, Mohave, Santa Cruz, and Yavapai reported such use. In addition, La Paz and Pinal counties also have high percentages of youth who reported underage drinking.

**Table 4.90. Numbers and Percentages of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> Grade Students Who Reported Drinking Alcohol During the Past 30 Days, Statewide and by County, Arizona, 2006**

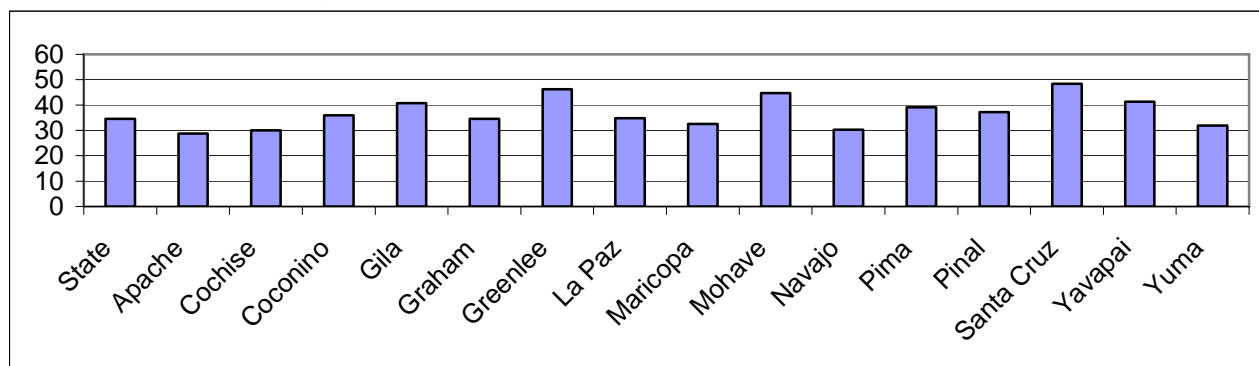
County	8 <sup>th</sup> Grade		10 <sup>th</sup> Grade		12 <sup>th</sup> Grade		All Grades Combined	
	%	N	%	N	%	N	%	N
<b>State</b>	24.10	5,914	39.20	7,284	47.00	6,330	34.50	19,528
<b>Apache</b>	17.90	61	30.70	80	43.20	96	28.80	237
<b>Cochise</b>	21.00	163	39.70	195	42.90	78	30.00	436
<b>Coconino</b>	26.70	120	37.90	120	48.10	137	35.90	377
<b>Gila</b>	<b>34.30</b>	116	<b>48.10</b>	126	42.10	75	<b>40.70</b>	317
<b>Graham</b>	25.70	74	38.20	102	40.20	115	34.60	291
<b>Greenlee</b>	<b>37.60</b>	32	<b>48.10</b>	39	<b>55.40</b>	36	<b>46.30</b>	107
<b>La Paz</b>	<b>28.50</b>	37	37.10	56	42.60	26	34.80	119
<b>Maricopa</b>	23.00	3,618	36.50	3,884	45.90	3,576	32.50	11,078
<b>Mohave</b>	<b>34.60</b>	149	<b>46.20</b>	365	<b>50.70</b>	266	<b>44.70</b>	780
<b>Navajo</b>	26.60	130	33.70	161	30.40	106	30.20	397
<b>Pima</b>	24.20	553	43.30	1,091	49.80	1,097	39.10	2,741
<b>Pinal</b>	<b>30.30</b>	300	44.10	193	<b>51.10</b>	136	37.20	629
<b>Santa Cruz</b>	28.00	89	<b>49.70</b>	267	<b>61.20</b>	276	<b>48.40</b>	632
<b>Yavapai</b>	24.20	137	<b>49.00</b>	304	<b>55.00</b>	194	<b>41.30</b>	635
<b>Yuma</b>	24.50	335	41.50	301	43.10	116	31.90	752

Note. Percentages in bold indicate the five counties by grade reporting the highest percentage of past 30-day alcohol use.

Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

Available at: [http://azcjc.gov/pubs/home/2006\\_AYS\\_County\\_Reports.pdf](http://azcjc.gov/pubs/home/2006_AYS_County_Reports.pdf)

*Figure 4.49. Percentages of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> Grade Students Who Reported Drinking Alcohol During the Past 30 Days, Statewide and by County, Arizona, 2006.*



Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

Binge drinking may be indicative of youth problem drinking that could lead to dependence in youth or later in adulthood. Counties with the highest percentages (at or above 25%) of youth who reported binge drinking within the last two weeks were: Gila, Greenlee, Mohave, Santa Cruz and Yavapai, which were the same five counties with the highest percentages of youth who reported past 30-day alcohol use. In addition, youth in Apache, Graham and Yuma counties reported high percentages of youth who engaged in this risky behavior. Interestingly, neither of these three counties had the highest percentage of youth who reported past 30-day alcohol use, which may indicate that prevention efforts targeted at these counties focus on the harmful effects of binge drinking.

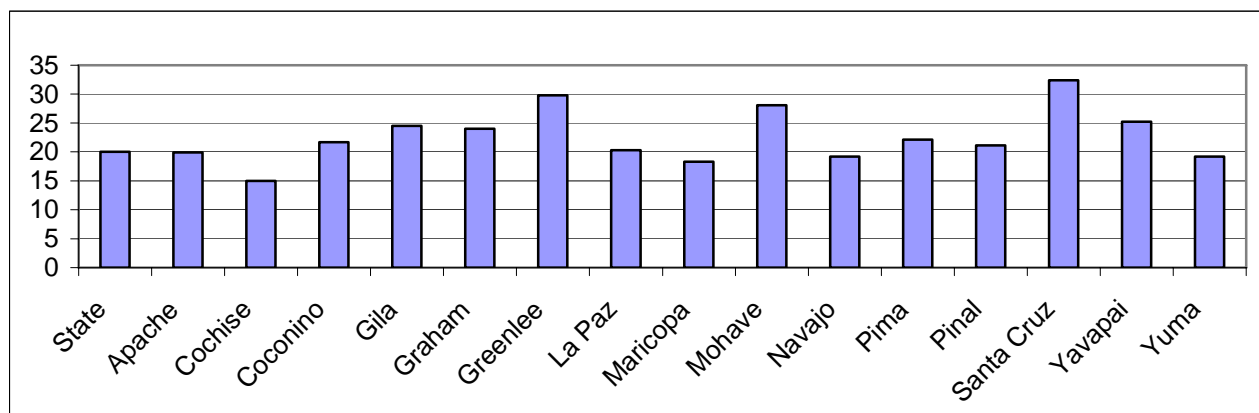
**Table 4.91. Numbers and Percentages of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> Grade Students Who Reported Binge Drinking in Past 2 Weeks, Statewide and by County, Arizona, 2006**

County	8 <sup>th</sup> Grade		10 <sup>th</sup> Grade		12 <sup>th</sup> Grade		All Grades Combined	
	%	N	%	N	%	N	%	N
<b>State</b>	13.00	3,082	22.00	4,046	28.00	3,744	20.00	10,872
<b>Apache</b>	13.00	43	18.90	45	<b>31.50</b>	70	19.90	158
<b>Cochise</b>	10.40	78	19.10	92	23.20	42	15.00	212
<b>Coconino</b>	17.40	75	24.70	78	25.00	70	21.70	223
<b>Gila</b>	<b>19.30</b>	64	<b>31.90</b>	83	23.60	42	<b>24.50</b>	189
<b>Graham</b>	<b>18.80</b>	55	26.90	71	26.60	75	24.00	201
<b>Greenlee</b>	<b>25.30</b>	20	<b>34.10</b>	28	29.90	20	<b>29.80</b>	68
<b>La Paz</b>	15.70	19	22.70	34	23.70	14	20.30	67
<b>Maricopa</b>	12.30	1,807	20.40	2,108	26.80	2,061	18.30	5,976
<b>Mohave</b>	<b>21.30</b>	88	<b>28.50</b>	219	<b>33.10</b>	170	<b>28.10</b>	477
<b>Navajo</b>	15.70	72	22.40	108	19.40	68	19.20	248
<b>Pima</b>	14.00	302	22.10	539	30.00	649	22.10	1,490
<b>Pinal</b>	16.90	161	24.80	108	30.20	80	21.10	349
<b>Santa Cruz</b>	<b>22.70</b>	71	<b>30.90</b>	164	<b>40.90</b>	184	<b>32.40</b>	419
<b>Yavapai</b>	11.90	63	<b>31.20</b>	194	<b>34.50</b>	124	<b>25.20</b>	381
<b>Yuma</b>	13.10	164	26.60	175	<b>30.70</b>	75	19.20	414

Note. Percentages in bold indicate the five counties by grade reporting the highest percentage of past 2-week binge drinking.

Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

*Figure 4.50. Percentage of Students Who Reported Binge Drinking in Past 2 Weeks, Statewide and by County, Arizona, 2006.*



Note. 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students combined.

Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

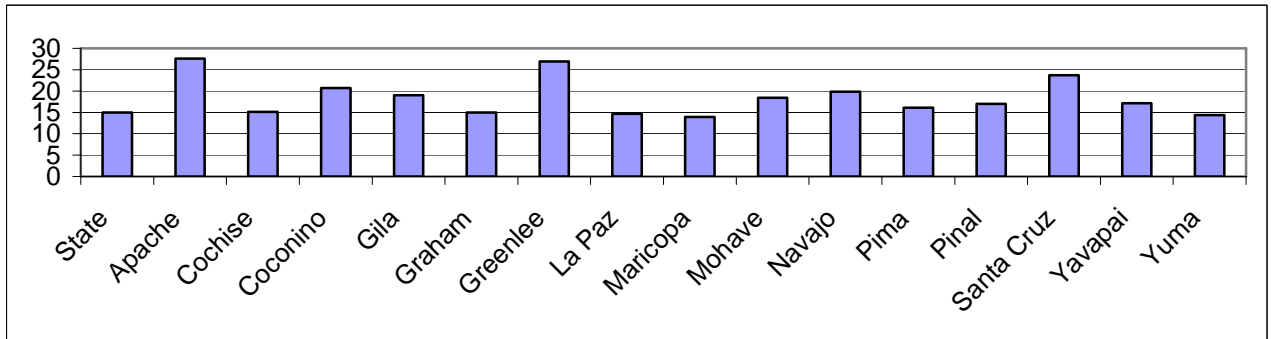
**Table 4.92. Numbers and Percentages of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> Grade Students Who Smoked Cigarettes During the Past 30 Days, Statewide and by County, Arizona, 2006**

County	8 <sup>th</sup> Grade		10 <sup>th</sup> Grade		12 <sup>th</sup> Grade		All Grades Combined	
	%	N	%	N	%	N	%	N
<b>State</b>	10.00	2,553	17.00	3,176	22.00	2,956	15.00	8,685
<b>Apache</b>	<b>23.40</b>	79	<b>27.20</b>	68	<b>34.20</b>	77	<b>27.60</b>	224
<b>Cochise</b>	10.20	79	19.70	97	23.40	43	15.10	219
<b>Coconino</b>	<b>14.90</b>	66	<b>23.50</b>	74	<b>26.70</b>	76	<b>20.70</b>	216
<b>Gila</b>	<b>15.60</b>	52	<b>22.60</b>	59	20.10	36	19.00	147
<b>Graham</b>	9.00	27	14.80	40	21.30	61	15.00	128
<b>Greenlee</b>	<b>19.30</b>	16	<b>29.80</b>	25	<b>32.80</b>	22	<b>26.90</b>	63
<b>La Paz</b>	8.70	11	19.90	30	14.30	9	14.70	50
<b>Maricopa</b>	9.30	1,444	15.30	1,620	21.30	1,665	13.90	4,729
<b>Mohave</b>	13.10	57	19.90	159	20.60	107	18.40	323
<b>Navajo</b>	<b>20.40</b>	100	20.40	99	18.30	64	<b>19.80</b>	263
<b>Pima</b>	11.50	263	16.40	411	20.50	452	16.10	1,126
<b>Pinal</b>	14.60	145	18.60	82	23.10	62	17.00	289
<b>Santa Cruz</b>	9.10	29	<b>26.10</b>	142	<b>31.20</b>	142	<b>23.70</b>	313
<b>Yavapai</b>	9.40	52	19.80	123	<b>24.40</b>	88	17.10	263
<b>Yuma</b>	9.90	133	20.70	147	19.80	52	14.40	332

Note. Percentages in bold indicate the five counties by grade reporting the highest percentage of past 30-day cigarette smoking.

Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

**Figure 4.51. Percentage of Students Who Smoked Cigarettes During the Past 30 Days, Statewide and by County, Arizona, 2006.**



Note. 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students combined.

Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

Counties with especially high percentages of youth who reported using methamphetamine in the past 30-days were Apache, Graham, La Paz, Mohave and Navajo. High percentages of youth in Cochise, Pinal and Santa Cruz counties also reported methamphetamine use during the last 30 days. Anti-methamphetamine efforts should be targeted at youth in Graham County as the highest percentage of youth who reported methamphetamine use were those living in this county. Further, Graham County did not have the highest percentage of youth who reported cigarette smoking, alcohol use or binge drinking, indicating that the primary substance use among these youth may be methamphetamine. However, these data should be interpreted with caution, as a higher percentage of youth reporting methamphetamine use in Graham County does not translate into larger numbers of youth using methamphetamine than those using tobacco or alcohol. Further, the absolute number of youth who reported using methamphetamine is lower in Graham County than in other counties.

**Finding:** Over 5% of 12<sup>th</sup> graders in Graham and La Paz counties reported methamphetamine use within the last 30 days, which translates to the use of methamphetamine within the last 30 days by more than 1 in 20 12<sup>th</sup> graders in these counties.

**Table 4.93. Percentage of Arizona Students\* Who Reported Using Methamphetamine in the Past 30-days, Statewide and by County, Arizona, 2006**

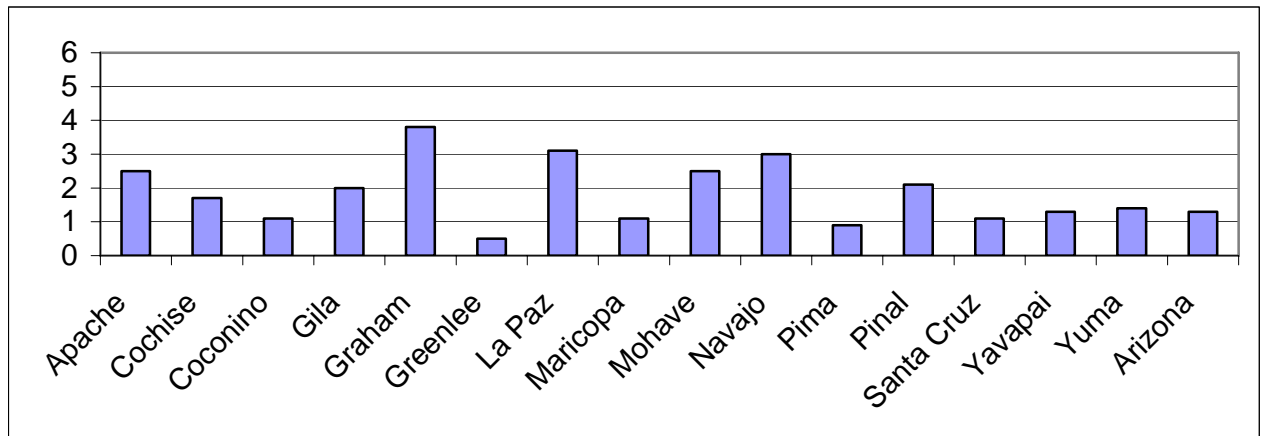
County	%
Apache	<b>2.50</b>
Cochise	1.70
Coconino	1.10
Gila	2.00
Graham	<b>3.80</b>
Greenlee	0.50
La Paz	<b>3.10</b>
Maricopa	1.10
Mohave	<b>2.50</b>
Navajo	<b>3.00</b>
Pima	0.90
Pinal	2.10
Santa Cruz	1.10
Yavapai	1.30
Yuma	1.40
State	1.30

Note. Percentages in bold indicate the five counties reporting the highest percentage of past 30-day youth methamphetamine use.

\*Students in 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> grades combined.

Source: Arizona Youth Survey: State Report, 2006. Arizona Criminal Justice Commission.

**Figure 4.52. Percentage of Arizona Students Who Reported Using Methamphetamine in the Past 30-days, Statewide and by County, Arizona, 2006.**



Note. 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students combined.

Source: Arizona Youth Survey: State Report, 2006. Arizona Criminal Justice Commission.

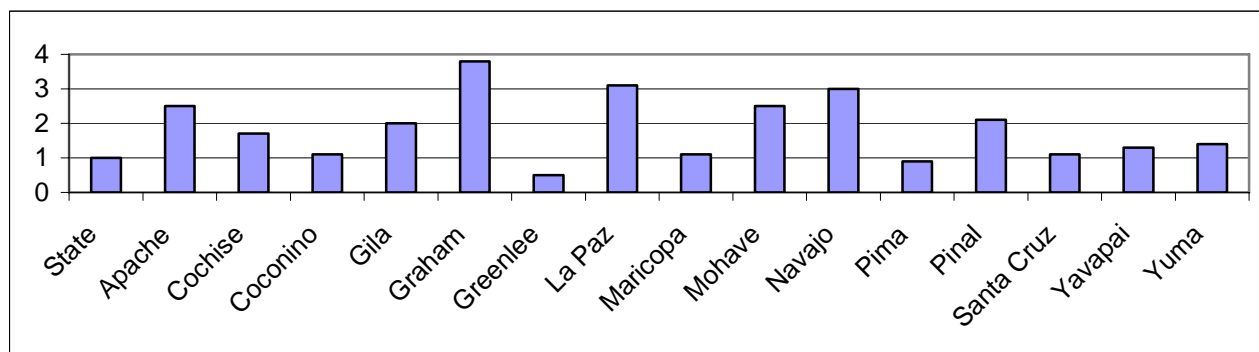
**Table 4.94. Numbers and Percentages of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> Grade Students Who Used Methamphetamine During the Past 30 Days, Statewide and by County, Arizona, 2006**

County	8 <sup>th</sup> Grade		10 <sup>th</sup> Grade		12 <sup>th</sup> Grade		All Grades Combined	
	%	N	%	N	%	N	%	N
<b>State</b>	1.00	223	2.00	292	1.00	182	1.00	697
<b>Apache</b>	<b>2.20</b>	7	2.90	7	<b>2.80</b>	6	<b>2.50</b>	20
<b>Cochise</b>	0.60	4	<b>3.30</b>	15	1.70	3	1.70	22
<b>Coconino</b>	1.00	4	1.40	4	1.10	3	1.10	11
<b>Gila</b>	1.20	4	2.90	7	2.30	4	2.00	15
<b>Graham</b>	<b>1.80</b>	5	<b>4.50</b>	11	<b>5.10</b>	13	<b>3.80</b>	29
<b>Greenlee</b>	0.00	0	1.30	1	0.00	0	0.50	1
<b>La Paz</b>	<b>4.80</b>	6	0.70	1	<b>5.20</b>	3	<b>3.10</b>	10
<b>Maricopa</b>	0.90	134	1.30	130	1.30	95	1.10	359
<b>Mohave</b>	0.80	3	<b>3.60</b>	26	<b>2.40</b>	12	<b>2.50</b>	41
<b>Navajo</b>	<b>2.60</b>	12	<b>3.70</b>	16	<b>2.50</b>	8	<b>3.00</b>	36
<b>Pima</b>	0.60	13	1.20	28	0.80	16	0.90	57
<b>Pinal</b>	1.10	10	<b>4.60</b>	19	1.60	4	2.10	33
<b>Santa Cruz</b>	<b>1.30</b>	4	0.80	4	1.40	6	1.10	14
<b>Yavapai</b>	0.80	4	2.00	11	0.90	3	1.30	18
<b>Yuma</b>	1.00	13	1.70	12	2.30	6	1.40	31

Note. Percentages in bold indicate the five counties by grade reporting the highest percentage of past 30-day methamphetamine use.

Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

**Figure 4.53. Percentages of Students Who Used Methamphetamine During the Past 30 Days, Statewide and by County, Arizona, 2006.**



Note. 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students combined.

Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

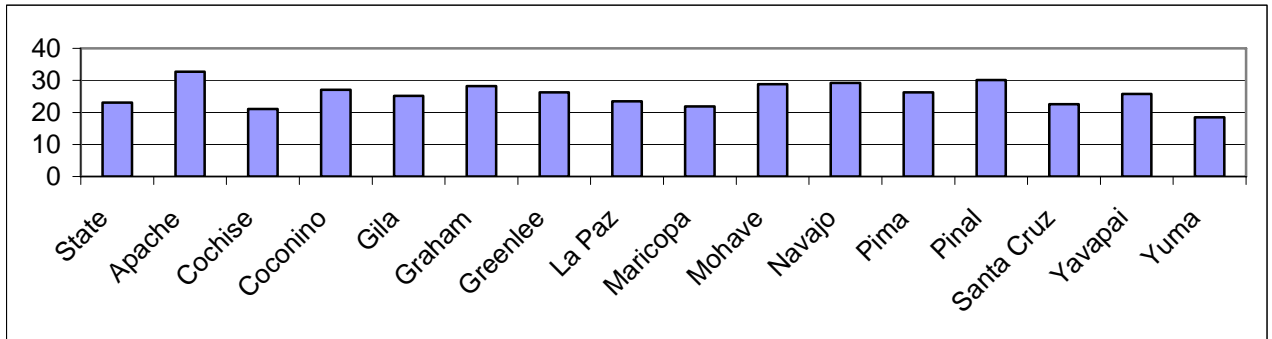
**Table 4.95. Numbers and Percentages of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> Grade Students Who Used Any Drug During the Past 30 Days, Statewide and by County, Arizona, 2006**

County	8 <sup>th</sup> Grade		10 <sup>th</sup> Grade		12 <sup>th</sup> Grade		All Grades Combined	
	%	N	%	N	%	N	%	N
<b>State</b>	20.00	3,917	26.00	4,049	26.00	3,115	23.00	11,081
<b>Apache</b>	<b>30.10</b>	90	<b>32.70</b>	74	<b>36.20</b>	76	<b>32.70</b>	240
<b>Cochise</b>	16.20	95	27.30	111	23.10	36	21.00	242
<b>Coconino</b>	<b>24.30</b>	90	28.70	74	29.20	73	27.00	237
<b>Gila</b>	20.30	60	<b>32.40</b>	72	23.90	37	25.10	169
<b>Graham</b>	18.30	42	<b>33.70</b>	70	<b>33.10</b>	78	<b>28.20</b>	190
<b>Greenlee</b>	20.60	14	26.60	17	<b>32.20</b>	19	26.20	50
<b>La Paz</b>	22.90	25	23.30	28	24.50	13	23.40	66
<b>Maricopa</b>	18.30	2,330	23.40	2,119	26.10	1,780	21.80	6,229
<b>Mohave</b>	<b>23.30</b>	78	31.00	200	<b>29.70</b>	133	<b>28.80</b>	411
<b>Navajo</b>	<b>28.20</b>	118	31.20	124	27.80	77	<b>29.20</b>	319
<b>Pima</b>	22.80	421	28.70	633	26.50	514	26.20	1,568
<b>Pinal</b>	<b>28.10</b>	215	<b>34.80</b>	127	<b>29.30</b>	68	<b>30.10</b>	410
<b>Santa Cruz</b>	21.00	60	24.80	115	21.00	86	22.50	261
<b>Yavapai</b>	18.60	86	<b>31.30</b>	163	27.10	82	25.70	331
<b>Yuma</b>	18.10	193	19.20	122	18.50	43	18.50	358

Note. Percentages in bold indicate the five counties by grade reporting the highest percentage of past 30-day any drug use.

Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

**Figure 4.54. Percentages of Students Who Used Any Drug During the Past 30 Days, Statewide and by County, Arizona, 2006.**



Note. 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students combined.

Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

Overall substance use appears to be most problematic in Greenlee, Mohave and Santa Cruz counties as these areas they were each one of the top five counties with the highest percentages of students who reported substance use for three of the four indicators: past 30-day alcohol use; past 30-day cigarette smoking; past 30-day use of any drug; and past 2-week binge drinking. In addition, 8<sup>th</sup> grade students in Gila, Greenlee and Mohave counties had the highest percentages of students who reported substance use for three of the four indicators. For 10<sup>th</sup> grade students, problematic geographic areas included Gila, Greenlee, Santa Cruz and Yavapai counties. 12<sup>th</sup> grade appears to be a more dangerous time in the lives of youth as Apache, Greenlee, Mohave, Santa Cruz and Yavapai counties each had the highest percentages of 12<sup>th</sup> grade students who reported substance use for three out of the four indicators.

**Table 4.96. Number of Times a County Had One of the Five Highest Percentages of Use for Past 30-Day Alcohol, Past 30-Day Cigarette, Past 30-Day Any Drug, and Past 2-Week Binge Drinking, by Grade**

	8 <sup>th</sup> Grade	10 <sup>th</sup> Grade	12 <sup>th</sup> Grade	All Grades Combined
Apache	2	2	<b>3</b>	2
Cochise	0	0	0	0
Coconino	2	1	1	1
Gila	<b>3</b>	<b>4</b>	0	2
Graham	1	1	1	1
Greenlee	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
La Paz	1	0	0	0
Maricopa	0	0	0	0
Mohave	<b>3</b>	2	<b>3</b>	<b>3</b>
Navajo	2	0	0	2
Pima	0	0	0	0
Pinal	2	1	2	1
Santa Cruz	1	<b>3</b>	<b>3</b>	<b>3</b>
Yavapai	0	<b>3</b>	<b>3</b>	2
Yuma	0	0	1	0

Note. Numbers in bold indicate that the county had one of the five highest percentages of youth (by grade) who reported 3 or 4 times.

Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

**Table 4.97. Number of Times a County Had One of the Five Highest Percentages of Use for Past 30-Day Alcohol and Past 2-Week Binge Drinking, by Grade**

	8 <sup>th</sup> Grade	10 <sup>th</sup> Grade	12 <sup>th</sup> Grade	All Grades Combined
Apache	0	0	1	0
Cochise	0	0	0	0
Coconino	0	0	0	0
Gila	<b>2</b>	<b>2</b>	0	<b>2</b>
Graham	1	0	0	0
Greenlee	<b>2</b>	<b>2</b>	1	<b>2</b>
La Paz	1	0	0	0
Maricopa	0	0	0	0
Mohave	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
Navajo	0	0	0	0
Pima	0	0	0	0
Pinal	1	0	1	0
Santa Cruz	1	<b>2</b>	<b>2</b>	<b>2</b>
Yavapai	0	<b>2</b>	<b>2</b>	<b>2</b>
Yuma	0	0	1	0

Source: *Arizona Youth Survey: County Reports, 2006*. Arizona Criminal Justice Commission.

**Table 4.98. Number of Times a County Had One of the Five Highest Percentages of Past 30-Day Any Drug Use, by Grade**

	8 <sup>th</sup> Grade	10 <sup>th</sup> Grade	12 <sup>th</sup> Grade	All Grades Combined
Apache	1	1	1	1
Cochise	0	0	0	0
Coconino	1	0	0	0
Gila	0	1	0	0
Graham	0	1	1	1
Greenlee	0	0	1	0
La Paz	0	0	0	0
Maricopa	0	0	0	0
Mohave	1	0	1	1
Navajo	1	0	0	1
Pima	0	0	0	0
Pinal	1	1	1	1
Santa Cruz	0	0	0	0
Yavapai	0	1	0	0
Yuma	0	0	0	0

Source: Arizona Youth Survey: County Reports, 2006. Arizona Criminal Justice Commission.

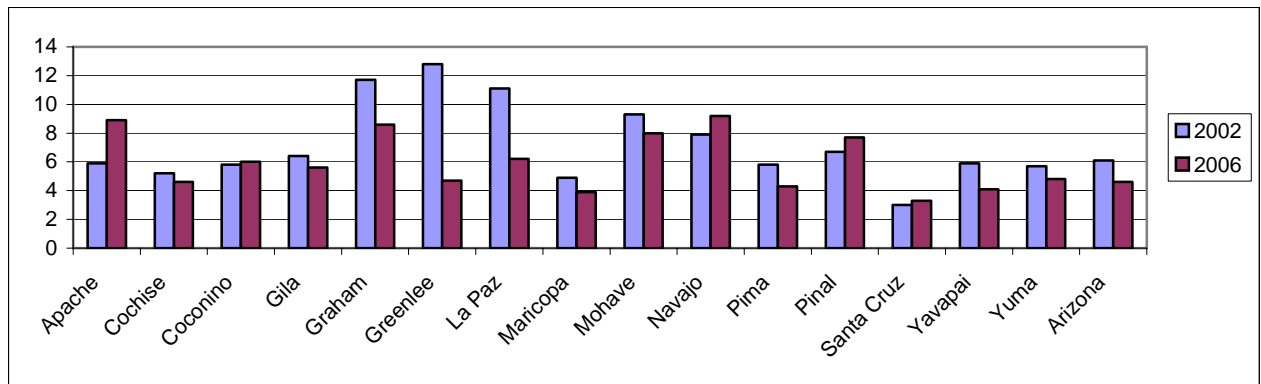
**Table 4.99. Methamphetamine Laboratory Seizures, Statewide and by County, Arizona, 2000 – 2006**

County	2000	2001	2002	2003	2004	2005	2006 <sup>2</sup>	Total
Apache	2	0	0	0	0	0	0	2
Cochise	0	2	2	4	0	0	1	9
Coconino	2	0	0	0	1	0	0	3
Gila	0	0	0	0	0	1	0	1
Graham	0	0	2	0	0	0	0	2
Greenlee	0	0	0	0	0	0	0	0
La Paz	0	0	0	0	0	0	0	0
Maricopa <sup>1</sup>	284	201	146	85	71	32	2	821
Mohave	6	6	7	10	4	3	0	36
Navajo	0	0	1	0	0	0	0	1
Pima <sup>1</sup>	15	19	12	9	5	10	1	71
Pinal	3	5	1	6	6	0	0	21
Santa Cruz	0	0	0	0	0	0	0	0
Yavapai	5	2	4	0	0	0	0	11
Yuma	2	0	1	1	0	0	0	4
<b>Total</b>	<b>319</b>	<b>235</b>	<b>176</b>	<b>115</b>	<b>87</b>	<b>46</b>	<b>4</b>	<b>982</b>

<sup>1</sup> Information for Maricopa and Pima counties include data obtained from the El Paso Intelligence Center National Clandestine Laboratory Seizure System.

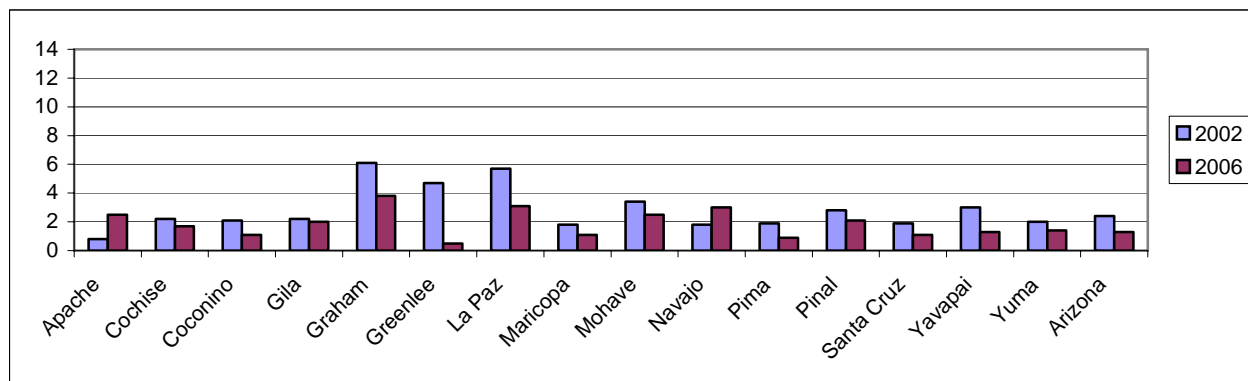
<sup>2</sup> 2006 data reflects lab seizures to date and is therefore incomplete.

Source: Office of National Drug Control Policy, Arizona High Intensity Drug Trafficking Area Intelligence Division, 2006.

**Figure 4.55. Trends in Percentages of 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Grade Youth Combined who Reported Past 30-Day Methamphetamine Use by County, 2002 & 2006.**

Source: Arizona Youth Survey: State Report, 2006. Arizona Criminal Justice Commission.

**Figure 4.56. Trends in Percentages of 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Grade Youth Combined who Reported Lifetime Methamphetamine Use by County, 2002 & 2006.**



Source: *Arizona Youth Survey: State Report, 2006*. Arizona Criminal Justice Commission.

### ***Hospital Discharges and Emergency Department Visits by Geography.***

For this analysis, more important than the absolute number of hospital discharges and Emergency Department visits are the rates of these occurrences, as this information helps to determine whether any particular county is disproportionately affected by substance use.

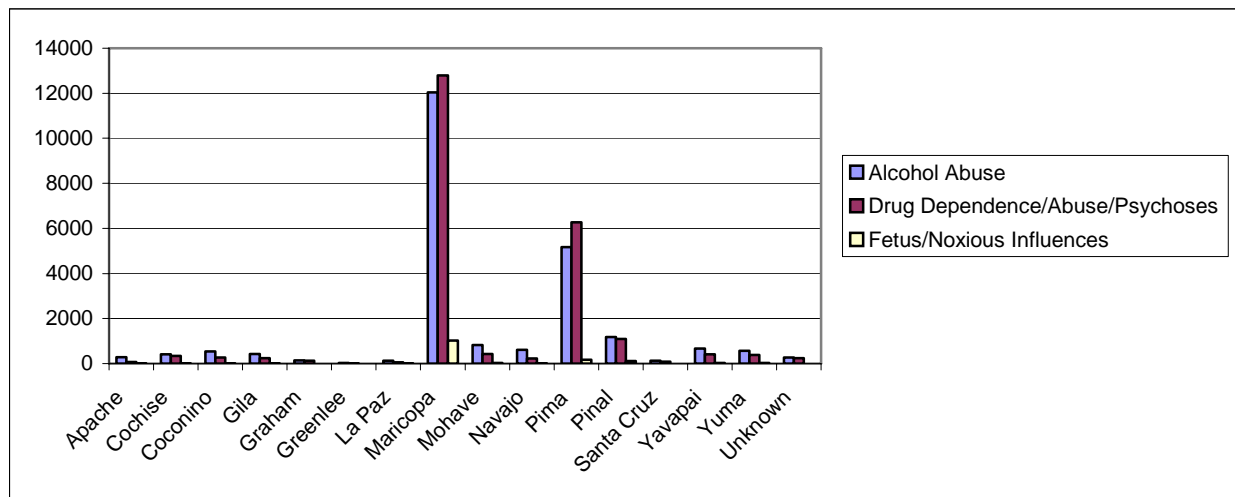
***Table 4.100. Hospital Discharges by Disorder and County, Arizona, 2005***

	Alcohol Abuse	Drug Dependence/Abuse/ Psychoses	Fetus/Noxious Influences
	N	N	N
Apache	290	66	8
Cochise	415	335	18
Coconino	539	268	19
Gila	429	238	15
Graham	139	121	6
Greenlee	27	19	--
La Paz	131	63	19
Maricopa	12,039	12,788	1,027
Mohave	822	432	24
Navajo	605	231	19
Pima	5,169	6,264	167
Pinal	1,175	1,093	120
Santa Cruz	133	90	4
Yavapai	661	409	25
Yuma	571	378	26
Unknown	263	237	7

-- No data provided for this county.

Source: *Hospital Discharge Database*, 2005. Arizona Department of Health Services.

***Figure 4.57. Hospital Discharges by Disorder and County, Arizona, 2005.***



Source: *Hospital Discharge Database*, 2005. Arizona Department of Health Services.

**Table 4.101. Emergency Department Visits for Drug or Alcohol Abuse/Dependence/Psychosis by County, Arizona, 2005**

	Non-Dependent Abuse of Alcohol <sup>*</sup>	Alcohol Psychoses <sup>*</sup>	Alcohol Dependence <sup>*</sup>	Drug Dependence and Drug Abuse <sup>**</sup>
Apache	266	64	<b>311</b>	72
Cochise	438	30	197	<b>450</b>
Coconino	<b>1,784</b>	137	731	270
Gila	<b>258</b>	15	77	146
Graham	<b>155</b>	15	34	119
Greenlee	<b>19</b>	4	4	9
La Paz	<b>86</b>	6	17	32
Maricopa	<b>8,222</b>	748	2,365	7,949
Mohave	<b>541</b>	60	395	523
Navajo	<b>823</b>	56	219	231
Pima	<b>4,419</b>	326	1,999	3,155
Pinal	<b>569</b>	26	100	512
Santa Cruz	<b>116</b>	11	49	98
Yavapai	<b>762</b>	103	376	518
<b>Yuma</b>	<b>423</b>	41	163	346
<b>Unknown</b>	<b>252</b>	17	80	172

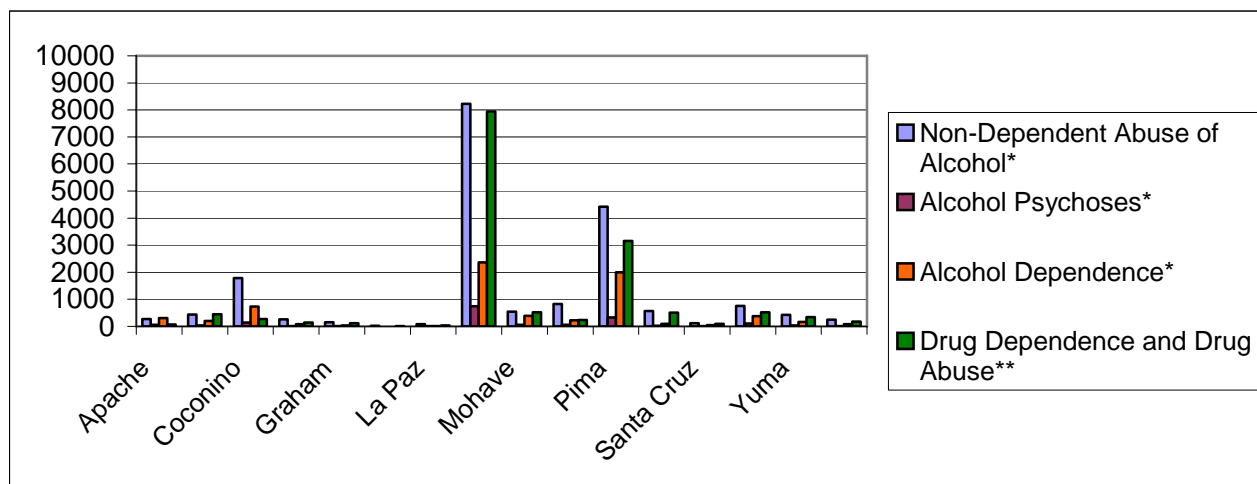
Note. Numbers in bold indicate the type of alcohol or drug abuse/dependence/psychoses most often requiring treatment in an Emergency Department by county.

<sup>\*</sup> All mentions

<sup>\*\*</sup> First-listed diagnosis

Source: *Hospital Discharge Database*, 2005. Arizona Department of Health Services.

**Figure 4.58. Emergency Department Visits for Drug or Alcohol Abuse/Dependence/Psychosis by County, Arizona, 2005**



<sup>\*</sup> All mentions

<sup>\*\*</sup> First-listed diagnosis

Source: *Hospital Discharge Database*, 2005. Arizona Department of Health Services.

Table 4.102 indicates that the five counties with the highest rates (per 10,000 people) of hospital discharges for drug abuse and dependence are Pima, Gila, Pinal, Maricopa, and Mohave counties (in descending order). For the same indicator, Cochise County has the highest rate of Emergency Department visits followed by Graham, Pima, Mohave and Gila counties (respectively).

**Table 4.102. Hospital Discharges and Emergency Department (ED) Visits and Rates per 10,000 Population with Mentions of Drug Abuse and Dependence as First-Listed Diagnosis by County, Arizona, 2005**

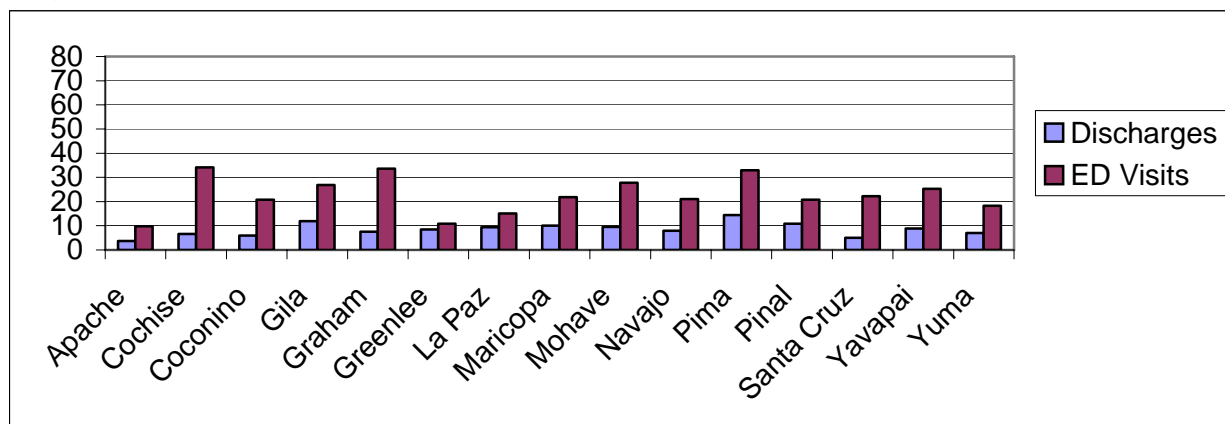
	Discharges		ED Visits	
	N	Rate	N	Rate
Apache	27	3.7	72	9.8
Cochise	87	6.6	450	<b>34.1</b>
Coconino	77	5.9	270	20.7
Gila	64	<b>11.9</b>	146	<b>26.8</b>
Graham	27	7.6	119	<b>33.6</b>
Greenlee	7	8.4	9	10.8
La Paz	20	9.4	32	15.1
Maricopa	3,694	<b>10.1</b>	7,949	21.8
Mohave	179	<b>9.5</b>	523	<b>27.8</b>
Navajo	87	7.9	231	21
Pima	1,375	<b>14.4</b>	3,155	<b>32.9</b>
Pinal	268	<b>10.9</b>	512	20.8
Santa Cruz	22	5	98	22.2
Yavapai	183	8.9	518	25.3
Yuma	133	7	346	18.3
Unknown	73	--	172	--

Note. Rates in bold indicate the five counties with the highest rates of hospital discharges and Emergency Department visits for drug abuse and dependence as the first-listed diagnosis.

-- indicates that rates cannot be calculated when county is unknown.

Source: *Hospital Discharge Database*, 2005. Arizona Department of Health Services.

**Figure 4.59. Hospital Discharge and Emergency Department (ED) Visit Rates per 10,000 Population with Mentions of Drug Abuse and Dependence as First-Listed Diagnosis by County, Arizona, 2005.**



Source: *Hospital Discharge Database, 2005*. Arizona Department of Health Services.

As the data in Table 4.103 indicate, the counties with the highest rates of Emergency Department visits for alcoholic psychosis in 2005 were Apache, Coconino, Greenlee, Yavapai and Navajo. The counties with the highest rates were Coconino, Apache, Navajo, Mohave and Pima. Finally, Coconino, Navajo, Graham, Apache and Gila counties had the highest rates of Emergency Department visits for the non-dependent abuse of alcohol. Three counties had one of the top five rates for all three indicators of alcohol abuse: Apache, Coconino and Navajo, indicating that these counties are especially in need of alcohol intervention efforts. Most notable is the high rate (almost 75 of every 10,000 individuals) of Emergency Department visits for the non-dependent abuse of alcohol in Coconino County.

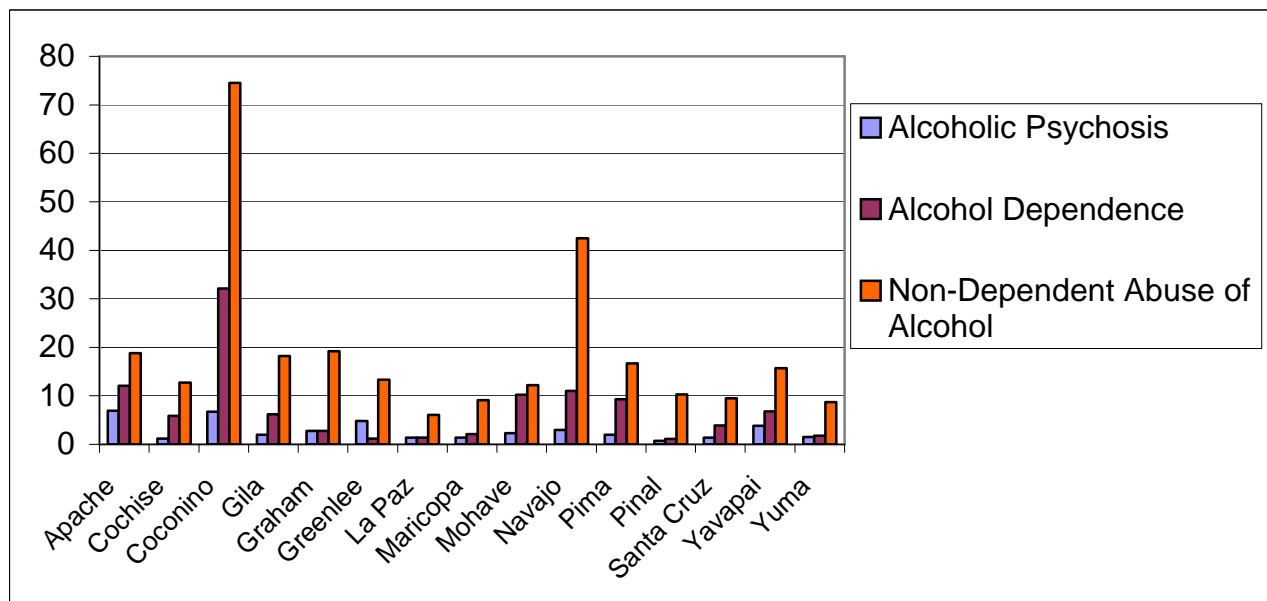
**Table 4.103. Emergency Department (ED) Visits and Rates (per 10,000 Population) for Selected Diagnoses Related to Alcohol Abuse and Dependence as First-Listed Diagnosis by County, Arizona, 2005**

	Alcoholic Psychosis		Alcohol Dependence		Non-Dependent Abuse of Alcohol	
	N	Rate	N	Rate	N	Rate
<b>Apache</b>	51	<b>6.90</b>	89	<b>12.10</b>	139	<b>18.80</b>
<b>Cochise</b>	16	1.20	78	5.90	168	12.70
<b>Coconino</b>	88	<b>6.70</b>	419	<b>32.10</b>	973	<b>74.50</b>
<b>Gila</b>	11	2.00	34	6.20	99	<b>18.20</b>
<b>Graham</b>	10	2.80	10	2.80	68	<b>19.20</b>
<b>Greenlee</b>	4	<b>4.80</b>	1	1.20	11	13.30
<b>La Paz</b>	3	1.40	3	1.40	13	6.10
<b>Maricopa</b>	521	1.40	777	2.10	3,311	9.10
<b>Mohave</b>	44	2.30	191	<b>10.20</b>	230	12.20
<b>Navajo</b>	33	<b>3.00</b>	121	<b>11.00</b>	467	<b>42.50</b>
<b>Pima</b>	194	2.00	886	<b>9.30</b>	1,603	16.70
<b>Pinal</b>	18	0.70	27	1.10	253	10.30
<b>Santa Cruz</b>	6	1.40	17	3.90	42	9.50
<b>Yavapai</b>	77	<b>3.80</b>	139	6.80	322	15.70
<b>Yuma</b>	28	1.50	34	1.80	164	8.70
<b>Unknown</b>	12	--	36	--	120	--

Note. Rates in bold indicate the five counties with the highest rates of Emergency  
 -- indicates that rates cannot be calculated when county is unknown.

Source: *Hospital Discharge Database*, 2005. Arizona Department of Health Services.

**Figure 4.60. Emergency Department (ED) Visit Rates (per 10,000 Population) for Selected Diagnoses Related to Alcohol Abuse and Dependence as First-Listed Diagnosis by County, Arizona, 2005.**



Source: *Hospital Discharge Database, 2005*. Arizona Department of Health Services.

***Alcohol-Related Motor Vehicle Crashes by Geography.******Table 4.104. Alcohol-Related Motor Vehicle Crashes\* by County in which the Crash Occurred, Arizona, 2005***

	Incident Counts			Person Counts		
	Total	Fatalities	Injury Accidents	Property Damage	Killed	Injured
<b>Apache</b>	54	7	28	19	8	68
<b>Cochise</b>	88	5	39	44	6	60
<b>Coconino</b>	224	8	105	111	9	185
<b>Gila</b>	65	4	30	31	4	51
<b>Graham</b>	26	0	10	16	0	13
<b>Greenlee</b>	8	1	3	4	1	6
<b>La Paz</b>	27	7	11	9	8	24
<b>Maricopa</b>	5,149	103	2,244	2,802	111	3,856
<b>Mohave</b>	267	12	122	133	14	207
<b>Navajo</b>	79	6	38	35	6	78
<b>Pima</b>	980	22	473	485	23	741
<b>Pinal</b>	236	19	93	124	21	182
<b>Santa Cruz</b>	44	3	23	18	3	29
<b>Yavapai</b>	250	10	108	132	12	165
<b>Yuma</b>	188	6	98	84	7	131
<b>Total</b>	<b>7,685</b>	<b>213</b>	<b>3,425</b>	<b>4,047</b>	<b>233</b>	<b>5,796</b>

\* Excludes motorcycle, motorscooter, and moped drivers.

Source: Arizona Department of Transportation, unpublished data, 2005.

**Drug and Alcohol-Related Arrests by Geography.****Table 4.105. Drug and Alcohol-Related Arrests by County, Arizona, 2005**

	DUI	Drug Possession	Drug Sale/ Manufacturing
	N	N	N
Apache <sup>1</sup>	96	96	24
Cochise <sup>2</sup>	671	746	93
Coconino <sup>3</sup>	1,249	1,079	117
Gila <sup>4</sup>	196	145	52
Graham <sup>5</sup>	65	45	8
Greenlee <sup>6</sup>	31	69	4
La Paz	189	207	30
Maricopa <sup>7</sup>	23,897	15,099	1,867
Mohave <sup>8</sup>	838	1,090	146
Navajo <sup>9</sup>	599	296	69
Pima	4,574	10,262	1,203
Pinal <sup>10</sup>	987	904	130
Santa Cruz <sup>11</sup>	161	122	3
Yavapai <sup>12</sup>	1,373	1,083	267
Yuma <sup>13</sup>	449	1,005	41

<sup>1</sup> Apache County Sheriff's Office did not provide complete data.

<sup>2</sup> Tombstone Marshal's Office did not provide complete data.

<sup>3</sup> Williams Police Department did not provide complete data.

<sup>4</sup> Hayden and Miami police departments did not provide complete data.

<sup>5</sup> Graham County Sheriff's Office, Pima Police Department, and Safford Police Department did not provide complete data.

<sup>6</sup> Clifton Police department did not provide complete data.

<sup>7</sup> Avondale Police Department and AZ State Capitol Police Department did not provide complete data.

<sup>8</sup> Colorado City Marshal's Office did not provide complete data.

<sup>9</sup> Navajo County Sheriff's Office and Pinetop-Lakeside Police Department did not provide complete data.

<sup>10</sup> Superior Police Department did not provide complete data.

<sup>11</sup> Santa Cruz County Sheriff's Office and Patagonia Marshall's Office did not provide complete data.

<sup>12</sup> Jerome Police Department and Sedona Police Department did not provide complete data.

<sup>13</sup> AZ Western College Police Department and San Luis Police Department did not provide complete data.

Source: *Crime in Arizona, 2005*. Arizona Department of Public Safety.

**Finding:** Overall, Coconino County had the highest or second-highest rate for three of the five indicators: drug dependence/abuse hospital discharges; drug dependence/abuse Emergency Department visits; alcohol dependence Emergency Department visits; non-dependent abuse of alcohol Emergency Department visits; or alcoholic psychosis Emergency Department visits. Further, Apache County had the highest or second-highest rate on two of the five indicators.

**Table 4.106. Counties with the Highest Rates for Select Problem Indicators**

County	Drug Dependence/ Abuse Discharges	Drug Dependence/ Abuse ED Visits	Alcohol Dependence ED Visits	Non- Dependent Abuse of Alcohol ED Visits	Alcoholic Psychosis ED Visits
Apache					
Cochise					
Coconino					
Gila					
Graham					
Greenlee					
La Paz					
Maricopa					
Mohave					
Navajo					
Pima					
Pinal					
Santa Cruz					
Yavapai					
Yuma					

Note. Black cells indicate either highest or 2<sup>nd</sup>-highest rate; gray cells indicate 3<sup>rd</sup>, 4<sup>th</sup>, or 5<sup>th</sup>-highest rate.

Source: *Hospital Discharge Database*, 2005. Arizona Department of Health Services.

**Problem Indicators by Geography Summary:** Higher percentages of youth in Graham and La Paz counties reported methamphetamine use within the 30 days preceding the survey than youth in other counties, with more than 1 in 20 12<sup>th</sup> graders reporting use of the substance in these counties. Overall, rural counties appear to experience more a greater proportion of problems with substance abuse than do metropolitan counties. Three rural counties had one of the top five rates for all three indicators of alcohol abuse: Apache, Coconino and Navajo, indicating that these counties are especially in need of alcohol intervention efforts.